

From the INTERNATIONAL SEARCHING AUTHORITY

**PCT**

To:

OWENS-ILLINOIS, INC.  
Attn. Smith, Susan L.  
One SeaGate, 25-LDP  
Toledo, Ohio 43666  
UNITED STATES OF AMERICA

Owens-Illinois, Inc.

NOV 15 2005

INTELLECTUAL  
PROPERTY SECTION

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT AND  
THE WRITTEN OPINION OF THE INTERNATIONAL  
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing (day/month/year)	11/04/2005
Applicant's or agent's file reference 18039 PCT	<b>FOR FURTHER ACTION</b> See paragraphs 1 and 4 below
International application No. PCT/US2004/040587	International filing date (day/month/year) 02/12/2004
Applicant  OWENS-ILLINOIS CLOSURE INC.	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO, 34 chemin des Colombettes  
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

**For more detailed instructions,** see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

**4. Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Maria Zinburgova

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

##### Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18039 PCT	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/040587	International filing date (day/month/year) 02/12/2004	(Earliest) Priority Date (day/month/year) 03/12/2003
Applicant  OWENS-ILLINOIS CLOSURE INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 2

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

## Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A child-resistant package (20) includes a container (24) having a finish (28) with an open end (36), at least one external thread (34), at least one stop lug (32) projecting radially outwardly from the finish, and a closure (22) having a base wall (56), a skirt (60) with at least one internal thread (64) for engagement with the thread on the container finish, at least one spring element (58), and at least one pair of internal lugs (76,78) on the skirt and extending radially inwardly from the skirt. Each pair of lugs on the skirt includes a first lug (76) that cooperates with the stop lug on the container finish to prevent unthreading of the closure from the finish absent pressure on the closure against the spring element to push the first lug on the skirt beneath the corresponding stop lug on the container finish, and a second lug (78) circumferentially spaced from the first lug that cooperates with the stop lug on the container finish to prevent "over-threading" or over tightening of the closure on the finish.

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B65D50/04 B65D41/04

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3 880 313 A (AKERS ET AL) 29 April 1975 (1975-04-29)	1-4, 10, 12-14, 17-21, 24, 32-41
A	the whole document	5-9, 11
Y	US 5 449 078 A (AKERS ET AL) 12 September 1995 (1995-09-12)	25-31
A	the whole document	5-9, 11
Y	US 3 610 454 A (DELL M. MALICK) 5 October 1971 (1971-10-05)	1-4, 10, 12-14, 17-21, 24-41
	the whole document	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

31 March 2005

Date of mailing of the international search report

11/04/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Balz, O

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 032 028 A (REISS ET AL) 28 June 1977 (1977-06-28) the whole document	1,12,13
A	EP 1 302 406 A (OWENS-ILLINOIS CLOSURE INC) 16 April 2003 (2003-04-16) the whole document	1

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
✓ US 3880313	A	29-04-1975	NONE
✓ US 5449078	A	12-09-1995	AT 232488 T 15-02-2003
		AU 685303 B2	15-01-1998
		AU 2950895 A	09-02-1996
		CA 2194452 A1	25-01-1996
		DE 69529613 D1	20-03-2003
		DE 69529613 T2	06-11-2003
		DK 770020 T3	02-06-2003
		EP 0770020 A1	02-05-1997
		ES 2192203 T3	01-10-2003
		PT 770020 T	30-04-2003
		WO 9601768 A1	25-01-1996
US 3610454	A	05-10-1971	NONE
✓ US 4032028	A	28-06-1977	NONE
EP 1302406	A	16-04-2003	US 2003121877 A1 03-07-2003
		BR 0205918 A	22-07-2003
		CA 2408064 A1	16-04-2003
		CN 1420065 A	28-05-2003
		EP 1302406 A2	16-04-2003
		HU 0203498 A2	28-06-2003
		JP 2003285852 A	07-10-2003
		NZ 522004 A	28-11-2003
		PL 356678 A1	22-04-2003
		US 2005055986 A1	17-03-2005

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/040587

International filing date (day/month/year)  
02.12.2004

Priority date (day/month/year)  
03.12.2003

International Patent Classification (IPC) or both national classification and IPC  
B65D50/04, B65D41/04

Applicant  
OWENS-ILLINOIS CLOSURE INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized Officer

Balz, O

Telephone No. +49 89 2399-7218





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**Box No. I    Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
  
☐ a sequence listing  
  
☐ table(s) related to the sequence listing
  - b. format of material:  
  
☐ in written format  
  
☐ in computer readable form
  - c. time of filing/furnishing:  
  
☐ contained in the international application as filed.  
  
☐ filed together with the international application in computer readable form.  
  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-43
	No: Claims	
Inventive step (IS)	Yes: Claims	15,16,22,23,42,43
	No: Claims	1-14,17-21,24-41
Industrial applicability (IA)	Yes: Claims	1-43
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Re Item V.**

1. Reference is made to the following documents:
  - D1: US-A-3 880 313 (AKERS ET AL) 29 April 1975 (1975-04-29)
  - D2: US-A-5 449 078 (AKERS ET AL) 12 September 1995 (1995-09-12)
  - D3: US-A-3 610 454 (DELL M. MALICK) 5 October 1971 (1971-10-05)
  - D4: US-A-4 032 028 (REISS ET AL) 28 June 1977 (1977-06-28)
  - D5: EP-A-1 302 406 (OWENS-ILLINOIS CLOSURE INC) 16 April 2003 (2003-04-16)
  
2. The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 1 does not involve an inventive step in the sense of Article 33(3)PCT.
  
- 2.1. Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 1, discloses (the references in parentheses applying to this document): A child-resistant package (10) that includes: a container (12) having a cylindrical finish (18) with an open end (16) , [...] at least one stop lug (22) [...] projecting radially outwardly from said finish, and a closure (14) having a base wall (24), a skirt (26) [...], at least one pair of internal lugs (30, 32) on said skirt and extending radially inwardly from said skirt, and at least one spring element (28) operably associated with said open end of said finish to bias said closure axially of said finish, said at least one pair of lugs on said skirt including a first lug (30) for cooperating with said at least one stop lug on said finish to prevent unthreading of said closure from said finish absent pressure on said closure against said spring element to push said first lug on said skirt beneath said at least one stop lug on said finish, and a second lug (32) circumferentially spaced from said first lug for cooperating with said at least one stop lug on said finish to prevent further threading of said closure onto said finish.

The subject-matter of independent claim 1 differs from the disclosure of D1 in that the

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closure and the container comprise threads.

The problem to be solved by the present invention may therefore be regarded as providing an reliable connection between container and closure.

However, these features have already been employed for the same purpose in a similar package, see document D3, figure 2. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a package according to document D1, thereby arriving at a package according to claim 1.

3. Document D2, which is considered to represent the most relevant state of the art to the subject matter of claim 25, discloses (the references in parentheses applying to this document): a container (10) for a child-resistant package, including: a cylindrical finish (15) having an axis and an open end(16),[...] at least one stop lug projecting radially outwardly from said finish, said stop lug having a cam surface and a radially outwardly extending flange spaced clockwise from the cam surface and disposed closer to said open end than at least a portion of said cam surface (see figure 5).

The subject-matter of independent claim 25 differs from the disclosure of D2 in that the closure comprises external threads for engagement with the threads of a closure.

The problem to be solved by the present invention may therefore be regarded as providing an reliable connection between container and a closure.

However, these features have already been employed for the same purpose in a similar container, see document D3, figure 2. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a container according to document D2, thereby arriving at a container according to claim 25.

4. Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 32, discloses (the references in parentheses applying to this document): A closure (14) for a child-resistant package (10) including a base

wall (24), a skirt (26) [...], at least one pair of internal lugs (30, 32) on said skirt extending radially inwardly from said skirt, and at least one spring element (28) carried by one of said base wall and said skirt, said at least one pair of lugs on said skirt including a first lug (30) for cooperating with a stop lug on a container finish to prevent unthreading of said closure from said finish absent pressure on said closure against said spring element to push said first lug on said skirt beneath said at least one stop lug on said finish, and a second lug (32) circumferentially spaced from said first lug for cooperating with said at least one stop lug on said finish to prevent further threading of said closure onto said finish.

The subject-matter of independent claim 32 differs from the disclosure of D1 in that the closure comprises threads for engagement with threads of a container.

The problem to be solved by the present invention may therefore be regarded as providing an reliable connection between container and closure.

However, these features have already been employed for the same purpose in a similar package, see document D3, figure 2. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a closure according to document D1, thereby arriving at a closure according to claim 32.

5. The technical features of the depending claims 2-14, 17-21 and 24-41 are known from at least one of the documents D1-D5 or constructional details known to the skilled person, e.g.:

claim 2-4, 10, 12-14, 24-28, 30, 31, 33-36: cam and stop surfaces (see D1 fig. 5, column 3 line 31-46; D2 fig. 6; D3 fig. 5, column 3, line 3-11)

claim 5-9, 11, 29: pocket; D1 discloses such a pocket on a lug of the closure instead on the stop lug of the container, which would just be the complementary

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/040587

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/040587

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claim 17-21,37-41: spring element (see D1, fig. 3, column 3, line 18-46).

Thus the subject-matter of these claims are not fulfilling the requirements of the PCT in regard to inventive step.

6. The combination of the features (spring stop) of dependent claim 15, 23 or 43 is neither known from, nor rendered obvious by, the available prior art.
7. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 is not mentioned in the description, nor are these documents identified therein.
8. Independent claims 1, 25 and 32 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Claim 1 comprises all the features of claim 32 and is therefore not appropriately formulated as a claim dependent on the latter (Rule 6.4 PCT).

9. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/040587

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